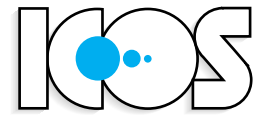


**AMS & ASS**



**AIR+STEAM  
MIXTURE  
STERILIZATION  
AUTOCLAVES**

**SUPERHEATED-WATER  
STERILIZATION  
AUTOCLAVES**



ICOS IS PRESENT ON WORLD MARKETS WITH A NEW AND EXTENSIVE RANGE OF STERILIZING AUTOCLAVES USING AN AIR+STEAM MIXTURE OR SUPERHEATED WATER. THESE AUTOCLAVES ARE USED IN THE PHARMACEUTICAL INDUSTRY AND IN THE FOOD-PROCESSING FIELD.

**THE "AMS" MODELS** IDENTIFY THE AUTOCLAVES THAT USE AN AIR+STEAM MIXTURE.

**THE "ASS" MODELS** IDENTIFY THE AUTOCLAVES THAT USE SUPERHEATED WATER.

**FIELD OF APPLICATION**

The autoclaves in this series are used to sterilize liquids contained in containers such as bottles, pockets, bags, etc.

**MAIN CHARACTERISTICS**

- Sterilization chamber of round cross section, containing all the accessories for its use with an air+steam mixture or superheated water.
- Machine body insulated with ceramic material and externally lined with sheet stainless steel.
- Machine body supported by a frame designed for a suitable load distribution on the floor.
- Chamber bottom fitted with guides for moving the product holding carts.
- Doors driven by an electromechanical system.
- Provision of connections required for the validation tests.
- Possibility of applying an automatic loading and unloading device for the product holding carts.

**CONSTRUCTION CHARACTERISTICS**

The machine body and associated safety devices are manufactured and tested in compliance with the standards required in the country of destination. Unless there is a specific request, the machines and systems are manufactured in compliance with the CE Standards.

- Machine body of AISI 316L stainless-steel construction.
- Support frame of AISI 304 stainless steel.
- External panelling made of AISI 304 stainless steel.
- All the machine components are of sanitary type.
- In the standard version, the door tightness is guaranteed by a pneumatically pressurized silicone gasket.
- On request, the door gasket can be made of an automatic pressure-sealing type. This system guarantees the tightness of the door in any condition of operation.
- The chamber inside surface, the tubing and all parts in contact with the product are polished to a degree of roughness  $\leq 0.5 \mu$ .



LOADING & UNLOADING SIDE  
Mod.: ASS 15 / 1500

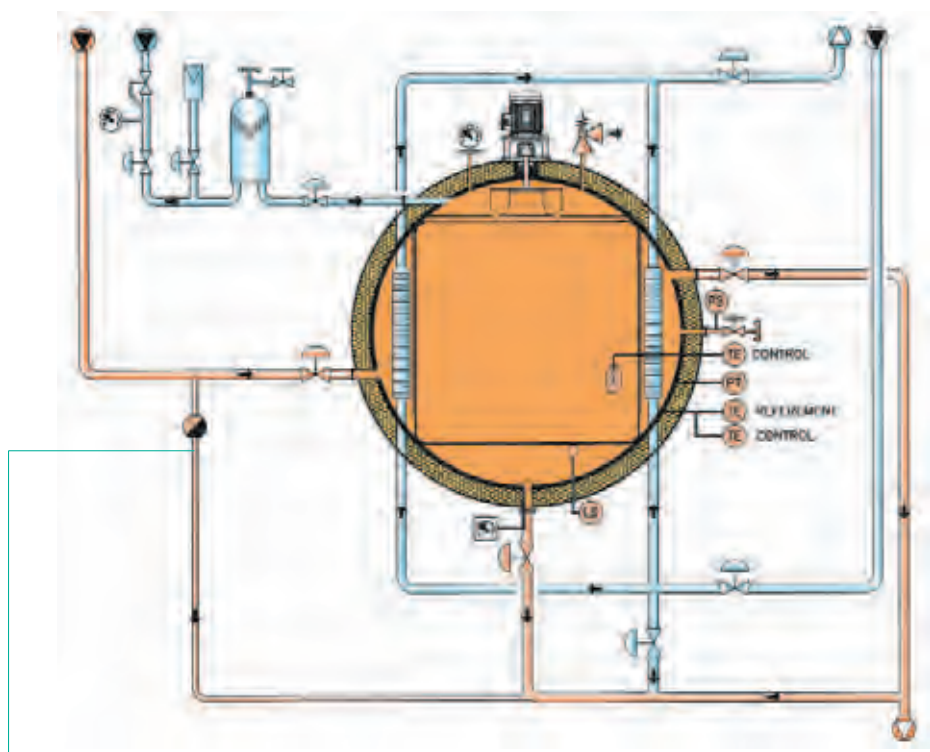


LOADING & UNLOADING SIDE  
Mod.: AMS 10 / 1500

**PROCESS DATA**

The sterilization program using an air+steam mixture is applied for different types of loads. It is also used in microbiological laboratories, particularly in the sterilization of sealed plastic containers. The process foresees the application of counterpressure to avoid permanent deformations.

The sterilization program using superheated water is used mainly for sterilizing large containers, although it can also be used for other types of loads. The product is treated in counterpressure, in order to avoid deforming or breaking the containers.



FUNCTIONAL DIAGRAM  
AIR + STEAM MIXTURE AUTOCLAVE

### CONTROL SYSTEM

The sterilizers using an air+steam mixture and superheated water are provided with a control system consisting of a programmable controller, computer and printer.

The control system manages the machine and its basic parameters, such as temperature, Fo and pressure; it allows an easy interfacing with the operator and makes it possible to customize the work cycles and manual operations. The system provides a complete hard-copy process documentation and assists in the convalidation procedures.

N.B.: A full description of the control system is contained in the relative booklet.

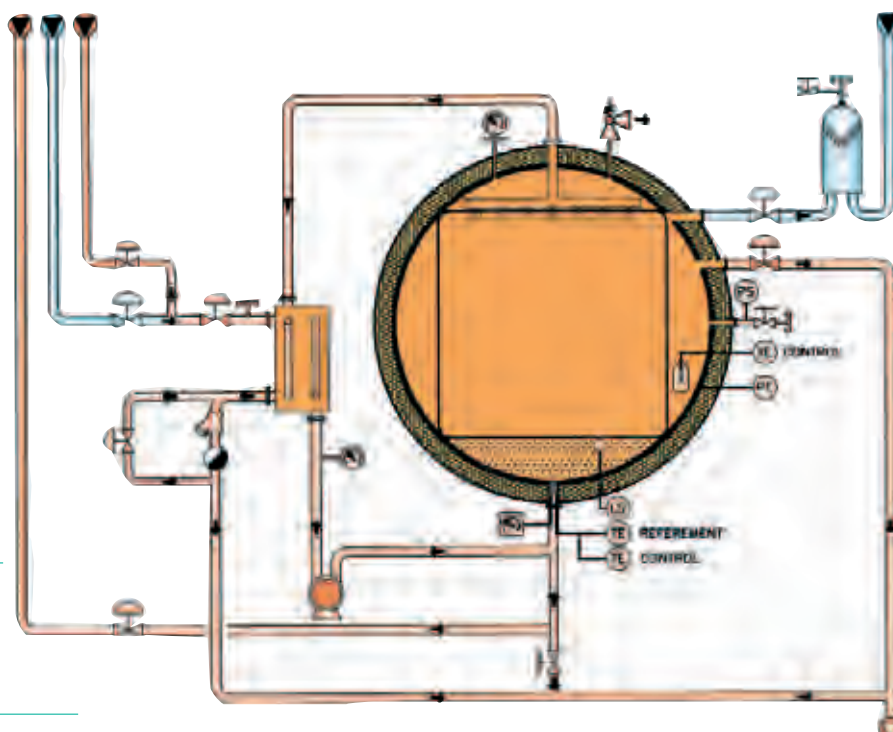
IN THE QUALITY OF THE MATERIALS USED, AND IN THEIR ACCURATE FINISH, CONSTRUCTION AND PROCESS CHARACTERISTICS, ALL THE ICOS MACHINES ARE IN COMPLIANCE WITH THE MOST UP-TO-DATE STANDARDS.



CONTROL BOARD

### AUTOMATIC LOADING AND UNLOADING

If particular reasons require that loading and unloading be carried out automatically, ICOS can propose a range of solutions compatible with the requirements of the customer.



FUNCTIONAL DIAGRAM

SUPERHEATED WATER AUTOCLAVE

**RANGE OF AIR+STEAM MIXTURE & SUPERHEATED WATER AUTOCLAVES**  
 Mod Serie AMS/ASS

	CAPACITY	CHAMBER DIMENSIONS (mm)		OVERALL DIMENSIONS (mm)		
	Lt.	Diameter	Depth	Width	Height	Depth
AMS/ASS 3/1100	1234	1100	1300	2200	2380	1780
AMS/ASS 6/1100	2469	1100	2600	2200	2380	3080
AMS/ASS 9/1100	3704	1100	3900	2200	2380	4380
AMS/ASS 5/1500	2296	1500	1300	2800	2480	1780
AMS/ASS 10/1500	4592	1500	2600	2800	2480	3080
AMS/ASS 15/1500	6888	1500	3900	2800	2480	4380
AMS/ASS 20/1500	9184	1500	5200	2800	2480	5680
AMS/ASS 12/1920	4630	1920	1600	3500	2580	2080
AMS/ASS 18/1920	7089	1920	2450	3500	2580	2930
AMS/ASS 24/1920	9404	1920	3250	3500	2580	3730
AMS/ASS 30/1920	11575	1920	4000	3500	2580	4480
AMS/ASS 36/1920	13890	1920	4800	3500	2580	5280
AMS/ASS 42/1920	16205	1920	5600	3500	2580	6080
AMS/ASS 48/1920	18520	1920	6400	3500	2580	6880
AMS/ASS 54/1920	20835	1920	7200	3500	2580	7680
AMS/ASS 60/1920	23150	1920	8000	3500	2580	8480





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